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FULBRIGHT & JAWORSKI L.L.P  
2200 ROSS AVENUE  
SUITE 2800  
DALLAS, TX 75201-2784

EXAMINER
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MANOHARAN, MUTHUSWAMY GANAPATHY

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* SAMMY MING KIT CHAU, SOUNG C. LIEW,  
VINCENT LAU, and PIU B. WONG

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Appeal 2009-009961  
Application 10/825,089  
Technology Center 2600

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Decided: March 22, 2010

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Before CARLA M. KRIVAK, ELENI MANTIS MERCADER,  
and CARL W. WHITEHEAD, JR., *Administrative Patent Judges*.

MANTIS MERCADER, Administrative Patent Judge.

DECISION ON APPEAL

## STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from the non-final Rejection of claims 1-18. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

## INVENTION

Appellants' claimed invention is directed to an intelligent wireless switch (Fig. 3; Intelligent Wireless Switch 200) which enables substantially continuous wireless communications to occur by successively associating with exterior wireless access points (Fig. 3; AP 103-1 and 103-2) through a plurality of wireless stations (Fig. 3; WS 201-1 and WS 201-2). When the intelligent wireless switch first detects an access point, one of the plurality of stations associates with that access point. Data associated with the wireless devices (Fig. 3; wireless devices 102) is routed to and from the access point through the respective station. *See* Spec. ¶ [0009] and Fig. 3.

Claim 1, reproduced below, is representative of the subject matter on appeal:

1. A method of managing communications associated with a plurality of wireless devices, comprising:
  - detecting a first access point;
  - associating a station of a wireless switch with said first access point;
  - routing data between said plurality of wireless devices and said first access point using said first station;
  - detecting a second access point;
  - associating a second station of said wireless switch with said second access point;
  - monitoring signal strengths of said first and second access points as received by said first and second stations; and
  - switching to routing data between said plurality of wireless devices and said second access point using said second station in response to said monitoring.

### THE REJECTION

The Examiner relies upon the following as evidence of unpatentability:

Avenbuch-2	US 5,268,933	Dec. 7, 1993
Avenbuch	US 5,867,785	Feb. 2, 1999
Ohyama	US 6,243,575 B1	Jun. 5, 2001
Gresham	US 2002/0160773 A1	Oct. 31, 2002
Noll	US 2003/0153316 A1	Aug. 14, 2003 (Feb. 12, 2002)
deTorbal	US 2004/0058678 A1	Mar. 25, 2004 (Sep. 23, 2002)

The following rejections are before us for review:

1. The Examiner rejected claims 1, 2, 3, 8, 9, 11, 13 and 18 under 35 U.S.C. § 103(a) as being unpatentable over Avenbuch in view of deTorbal.

2. The Examiner rejected claims 4, 10, and 17 under 35 U.S.C. § 103(a) as being unpatentable over Avenbuch in view of deTorbal and further in view of Avenbuch-2.

3. The Examiner rejected claims 5 and 6 under 35 U.S.C. § 103(a) as being unpatentable over Avenbuch in view of deTorbal and further in view of Noll.

4. The Examiner rejected claim 7 under 35 U.S.C. § 103(a) as being unpatentable over Avenbuch in view of deTorbal and further in view of Gresham.

5. The Examiner rejected claim 12 under 35 U.S.C. § 103(a) as being unpatentable over Avenbuch in view of deTorbal and further in view of Ohyama.

6. The Examiner rejected claims 14-16 under 35 U.S.C. § 103(a) as being unpatentable over Avenbuch in view of deTorbal and further in view of Noll.

### ISSUES

The pivotal issues are whether Avenbuch in view of deTorbal teaches first and second stations of a wireless switch as recited in independent claim 1, and a plurality of stations for communicating with external access points as recited in independent claims 9 and 13.

### FINDINGS OF FACT (FF)

The following findings of fact are supported by a preponderance of the evidence:

1. Appellants' "wireless switch" is defined in the Specification as "a wireless station broadly refers to a wireless device that is capable of wireless communication within a network or service area using an access point" (Spec. ¶ [0008]) enabling "continuous wireless communications to occur by successively associating with exterior wireless access points through its plurality of wireless stations" (Spec. ¶ [0009]).
2. deTorbal teaches an on-board radio unit (OBRU) 26 coupled to an omni-directional antenna 22 for communications with base station A and a directional antenna 24 for communications with base station B (¶ [0021]).

3. deTorbal further teaches that OBRU 26 initiates a handover notification procedure to prepare target base Station B (i.e., second access point) of an upcoming handover to prepare by reserving resources (§ [0021]).
4. deTorbal's OBRU does not control or become involved in the normal communications between the mobile radios 28 and the cellular network (§ [0025]).
5. Avenbuch's system controller 101 is pre-programmed with the geographic layout of the radio communications system 100 so that the mobile system controller 200 is handed off, solving the prior art problem of dropped communications (col. 8, ll. 8-48).

#### PRINCIPLES OF LAW

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d 1071, 1073 (Fed. Cir. 1988). The Examiner's articulated reasoning in the rejection must possess a rational underpinning to support the legal conclusion of obviousness. *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006).

#### ANALYSIS

Appellants argue, *inter alia*, Avenbuch does not teach first and second stations of a wireless switch as recited in claim 1 (App. Br. 6), or a plurality of stations for communicating with external access points as recited in independent claims 9 and 13 (App. Br. 8-9). Appellants further argue that deTorbal does not cure the cited deficiencies because deTorbal's on-board unit does not operate as a wireless switch, but rather, notifies a base station

of an upcoming handover (App. Br. 7). Appellants also argue that the Examiner used impermissible hindsight reconstruction to combine the references (App. Br. 7).

We are persuaded by Appellants' arguments. At the outset we note, that the "wireless switch" is defined in the Specification as "a wireless station broadly refers to a wireless device that is capable of wireless communication within a network or service area using an access point" enabling "continuous wireless communications to occur by successively associating with exterior wireless access points through its plurality of wireless stations" (FF 1). Accordingly, interpreting the claims in view of the Specification, independent claims 1, 9, and 13, require a plurality of stations for communicating with external access points.

The Examiner relied on deTorbal (Ans. 15) for the missing limitation of a "second station" or "a plurality of stations" and identified the on-board radio unit 26 as the wireless switch and antennas 26 and 24 as the first and second base stations. deTorbal teaches an on-board radio unit (OBRU) 26 coupled to an omni-directional antenna 22 (i.e., equivalent to Appellants' "a station" of claim 1) for communications with base station A (i.e., equivalent to Appellants' "first access point") and a directional antenna 24 (i.e., equivalent to Appellants' "a second station" of claim 1) for communications with base station B (i.e., equivalent to Appellants' "second access point") (FF 2; Ans. 15). deTorbal further teaches that OBRU 26 initiates a handover notification procedure to prepare target base Station B (i.e., second access point) of an upcoming handover to prepare by reserving resources (FF 3). The Examiner stated (Ans. 15) that it would have been obvious to modify Avenbuch and replace Avenbuch's base station 206 (antenna 206 Fig. 2)

with the two base stations of deTorbal (antennas 22 and 24) to allow for an early handover with no dropped calls.

We agree with Appellants' arguments (App. Br. 7-8) that deTorbal's OBRU does not control or become involved in the normal communications between the mobile radios 28 and the cellular network, and accordingly could not serve as a wireless switch (FF 4). Furthermore, Avenbuch's system controller 101 is pre-programmed with the geographic layout of the radio communications system 100 so that the mobile system controller 200 is handed off to solve the prior art problems of dropped communications (FF 5). Accordingly, we do not agree with the articulated rationale of modifying Avenbuch with deTorbal because Avenbuch already addressed the problem of dropped communications with a single base station 206. *See* Ans. 4-5. Thus, we also agree with Appellants' argument of the Examiner using impermissible hindsight reconstruction to combine the references (App. Br. 7).

The additional references of Avenbuch-2, Noll, Gresham, and Ohyama fail to cure the above cited deficiencies.

For the foregoing reasons, we will reverse the Examiner's rejections of claim 1, 9, and 13 and for similar reasons the rejections of claims 2-8, 10-12, 14-18.

## CONCLUSIONS

Avenbuch in view of deTorbal does not teach first and second stations of a wireless switch as recited in independent claim 1, and a plurality of stations for communicating with external access points as recited in independent claims 9 and 13.



Appeal 2009-009961  
Application 10/825,089

**ORDER**

The decision of the Examiner to reject claims 1-18 is reversed.

**REVERSED**

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FULBRIGHT & JAWORSKI L.L.P  
2200 ROSS AVENUE  
SUITE 2800  
DALLAS, TX 75201-2784